

Amendments to the Claims:

1.-3. (cancelled)

4. (currently amended) A modular system, comprising:

a rear panel bus having:

a plurality of slots configured to accommodate plug-in modules;

an optical waveguide for guiding optical signals, the optical waveguide having a number of breaks relative to a propagation direction of the optical signals, each break assigned to one of the slots; and

a plurality of modules plugged into the slots, each module including a coupling unit for coupling the optical signals to the respective module, wherein

a dimension of the breaks is only slightly larger than a dimension of the coupling units relative to the propagation direction,

each coupling unit comprises first and second optical waveguide parts,

one end of the first optical waveguide part has an oblique end face for completely coupling out the optical signals from the optical waveguide, and

one end of the second optical waveguide part has an oblique end face for coupling the optical signals into the waveguide in the propagation direction, the optical signals transmitted by an optical emitter arranged on the respective module;

wherein the modular system is an automation system, one of the inserted modules is configured as a master module for the remaining modules,

and wherein the master module is configured for communication and to check via the optical waveguide if a valid address has been assigned to the remaining modules.

5. (previously presented) The modular system according to claim 4, wherein the dimension of the breaks essentially equals the dimension of the coupling units relative to the propagation direction.

6. (previously presented) The modular system as claimed in claim 4, further comprising attenuating elements configured to be inserted into the breaks, wherein a dimension of the attenuating elements is slightly smaller than the dimension of the breaks, and the attenuating elements have a specific attenuation for the optical signals.

7. (previously presented) The modular system as claimed in claim 6, wherein the dimension of the attenuating elements essentially equals the dimension of the breaks.

8. (cancelled)

9. (cancelled)